Reckless prudence: Financialization in UK pension scheme governance after the crisis

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Abstract:
In pensions, the practice of valuation purports to answer the question of whether a pension fund has sufficient assets to honor its promises. Uncertainty about the answer is converted into calculable risk, using the insights of financial economics. This paper examines why UK pension funds have 'derisked' their portfolios by moving out of assets with volatile prices. It is shown that derisking is produced by the performance of financialized risk management in a regulatory setting where horizons are shortened. While derisking is not generally in the interests of employers or scheme members, and is damaging to the wider economy, three features of the governance structure have stymied attempts to counteract it. These are: the spillover effects of financialization in corporate accounting, herding around industry benchmarks, and collective action problems arising from the regulator's dependence on dialogue with private actors and from the risk-aversion of political actors.

Keywords: pensions, financialization, performativity, derisking, valuation, depoliticization

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1. Introduction

One of the challenges in researching financialization is to grasp the multiple channels through which finance shapes contemporary political economy. One crucial channel is that financialized ways of seeing, measuring and calculating have come to pervade economic life, as financial markets have grown and their modes of operation and calculation have evolved (Froud et al 2006). Research on the performativity of economics has proved particularly fruitful in understanding how financial markets work (MacKenzie 2008). But this thriving research program in economic sociology is not often linked to political economy (Braun 2016). This paper seeks to develop the links by focusing on the interface between market conduct and public policy, where regulation takes place.

Among the issues that public financial regulators face, there is one overarching dilemma: how to promote financial risk-taking to achieve a dynamic and productive economy while protecting public resources from depletion, potentially on a very large scale. As the failures of banks and other financial institutions in the Great Financial Crisis unfolded, it became inescapable to recognize that financial markets create substantial contingent liabilities for governments. Public authorities have responded by trying to make their unruly partners 'safer'. Post-crisis, safety-oriented regulation has contributed to an increase in the risk premium and an attenuated period of exceptionally low returns on safe assets. High demand for safe assets has reduced the effectiveness of quantitative easing (QE), in turn reducing the efficacy of monetary policy and contributing to macroeconomic stagnation (PCWG 2014, Part 1; Caballero et al 2017).

This paper demonstrates how both market actors and regulators understand 'safety' in a financialized way, and draws out the implications. It is argued that the financialized quest for safety can produce outcomes which are not in the interests of the participating parties nor really particularly safe from the perspective of public policy. This argument is

developed through a close analysis of pension fund valuation in the UK. Pension provision is a leading case for studying the interaction of public policy with financial markets. Financial interests promoted pension privatization, promising governments a way out of a pressing public policy problem (Engelen 2003). But private pensions created public policy problems of their own, as governments were drawn into bailing out schemes which had defaulted on their promises. This engendered tighter regulation in an effort to make schemes safer, and this has had perverse effects.

The focus of safety-oriented pension regulation is the process of valuation, which aims to establish whether a pension scheme has sufficient funds to meet its promises. The valuation of a pension scheme is financialized in the sense defined by Chiapello (2015, p.17): it is a process 'equipped by models, instruments, and representations belonging to the explicit knowledge underpinning the approach and practices of finance professionals.' All three of the financialized approaches to valuation identified by Chiapello are found in pension valuation: discounting is used to turn the future flow of pension payments into a present value for liabilities, assets are valued at market prices, and the risk that assets will be insufficient to meet liabilities in the future is estimated probabilistically. These techniques allow the uncertain future of pension obligations and fund performance to be reduced to a snapshot in which available information about the future is efficiently compressed into the present.

It is a striking achievement to render an uncertain future calculable in this way. Inevitably, calculations have to be updated in the light of unforeseen events. These may force expectations to be revised radically, as the financial crisis and the coronavirus pandemic have made clear. But the inevitability of error in forecasting is not the concern of the present discussion. Rather, this paper focuses on how valuation as a technique for forecasting affects decisions made now. Using the case of the UK to illustrate the processes at work, the argument is that valuation has contributed to the investment strategy of 'derisking', whereby occupational pension funds move out of equities and into bonds. This has consigned them to earning lower returns on investment, raising the cost of schemes and contributing to their closure. One paradoxical consequence is that many

households now do not have access to collective schemes which could pool risks and mitigate individual exposure. Derisking of collective schemes has turned out to mean more risk for households, which experience financialization as an individualization of responsibility for their future income security (Langley 2006).

Critics of an overly cautious approach to managing assets – termed 'reckless prudence' in the industry[1] - include public actors who might be expected to be influential: even, at one point, the Pensions Regulator, TPR (O'Higgins 2012). The consequences of derisking are bemoaned by influential commentators, notably at the Bank of England, who advocate that occupational pension funds should be patient risk-taking investors, weathering the storms of market volatility (Haldane 2014). Major reviews of institutional investment by Myners (2001) and Kay (2012b) have contributed to regulatory reforms intended to promote patient investment, yet the trajectory of derisking shows no signs of reversal.

The remarkable fact is that derisking occurs despite being an outcome that no interested party actively desires. Derisking is not in the interests of plan participants; nor do pension fund managers or other financial intermediaries receive obvious benefits, even though they often seem to be driving the process. As summarized by Kay (2012a, p.22), 'a substantial reduction in the commitment of UK pension funds to both UK and overseas equities.. benefitted no one: not pensioners, not the interests of companies which made pension provision, nor the UK economy.' The regulator might be seen as the actor whose interests prevail, with political pressure to avoid scheme failures making regulation highly risk-averse. Certainly, there is plenty of commentary that blames public regulation for destroying the UK's defined benefit occupational pensions (see e.g. Ellison 2018). But the following discussion shows that, while the regulator plays a key role, it does not act alone. The financial actors who serve as intermediaries in running pension funds – actuaries, consultants and investment managers – engage in a regulatory dialogue to which they bring ideational resources and expertise as well as preferences (Black 2008). The valuation process is the joint product of this public-private interaction.

This paper identifies three features of the valuation process which have combined to produce the perverse outcome of derisking. First, it is argued that specific expertise on pension scheme viability, cultivated by actuaries, has been displaced by the more generic insights of financial economics. This displacement has occurred partly because of spillover from the cognate privately-regulated area of corporate accounting. But it has also occurred because both private and public actors embrace the promise of financial economics to make the soundness of a pension scheme objectively 'computable' by converting incalculable uncertainty into calculable risk (Nelson and Katzenstein 2014; Esposito 2018, p.223). The key move in this calculation is to equate the riskiness of an asset with the volatility of its market price. Second, public-private interaction in regulation produces herding, due to the regulator's reliance on industry norms and benchmarks. The available market information leaves space for judgment, but this space is closed down by treating average judgments as a privileged form of information, almost as if they themselves are products of a market process. Third, attempts to reform valuation have failed because of collective action problems. Public policy-makers might be expected to surmount collective action problems, but this is stymied by the regulator's dependence on dialogue with private actors and by the risk-aversion of political actors.

Braun (2016) has argued that attention to the performativity of financial economic theories is an essential part of the research agenda of opening the black box of financial market practices. The next section introduces this argument, along with the complementary view that the practices of the industry should be understood as arising from a social process driven by the need for coordinating conventions (Nelson and Katzenstein 2014). It is argued that we should think of regulators as active participants in this process of market construction and coordination. But they operate inside, not above, the process, which is why this mode of public policy-making can be vulnerable to herding and fail to resolve collective action problems. In response, critics have proposed more democratization of regulation, but their case relies on an interest-based account of regulatory capture rather than grasping how public actors, both regulatory and political, can be constrained and steered by accepted theories.

Derisking is the result of a set of practices around pension fund valuation, which in turn affect asset management. Section three presents evidence on derisking in the UK and compares the UK with other countries.. Section four demonstrates how valuation practices apply financial economic theory, and introduces the critical assessments advanced by the Bank of England and others. Section five presents a case study of a sustained campaign to modify valuation outcomes in response to the effect of quantitative easing on interest rates, and examines why the government apparently preferred not to intervene. The final section concludes with some thoughts on what is to be done: specifically, whether finance can be steered towards serving public purposes through more democratization and politicization of regulation.

2. The role of theories in financial regulation and practice

There is now a burgeoning literature which grapples with the problem of explaining and interpreting the institutions of financial markets: the ways that financial instruments are constructed, valued and traded. The role of theories in shaping the operation of markets finds strong expression in the concept of performativity (MacKenzie 2008), while others argue that socially and culturally-founded conventions guide behavior (Nelson and Katzenstein 2014). This section provides a selective review of this literature and draws out the implications for understanding regulation, meaning in this context the establishment of rules and practices of market conduct by authoritative public agencies or private associations.

The performativity approach seeks to understand how economic theories affect the operation and regulation of markets. Its key insight is that 'the economy is embedded in economics' (Braun 2016, p.258). Economic ideas do not 'act on' the economy; rather, economic ideas are performed through the operation of markets. Instead of criticising economics for its unreality (in particular, its thin characterization of humans as rational actors), we should appreciate how economics is a program for constituting markets, determining how participants understand those markets, and thereby profoundly

influencing material outcomes. Thus the capital asset pricing model is ‘performed’ in models used by financial intermediaries to price assets and engage in arbitrage (MacKenzie 2008), while the ‘efficient markets’ axiom that the market prices of assets are the best available estimate of future income flows guides passive investment strategies based on index construction and trading (Braun 2016).

Contributions to the literature make more or less strong claims about the performativity of economics (MacKenzie 2008, p.17). A ‘weak’ claim is that participants in market processes use insights from economics; a stronger version is that the theory alters the world in a way which makes the theory more true. This also permits the possibility of counterperformativity, where the use of an economic model undermines its predictive power. MacKenzie does not embrace the notion, put forward by Callon, that performativity in economics cultivates the rational egoism of market participants; on the contrary, he finds that market actors engage in collective action to build institutions in the course of performing financial economic theory (2008, pp. 151-2). This opens up connections between performativity and regulation, as it suggests that actors can engage in deliberate design to achieve desired outcomes (MacKenzie 2008, p. 274).

It is not generally possible to verify the predictions of a theory and thereby evaluate its ‘truth’. In pension fund valuation, the correctness of the prediction (that a fund has sufficient resources to honor future claims, or not) cannot be verified for some time, so adherents replace truth with credibility or trust. Nelson and Katzenstein (2014) argue that financial techniques are embraced because of their credibility: specifically, their capacity to turn incalculable uncertainty into calculable risk. They demonstrate how practices such as the calculation of value-at-risk are useful to both market actors and regulators, despite being known to be flawed. They are silent on the theoretical origins of the calculation, which can be seen as a performance of financial economics. Instead, they emphasize how conventions ‘are adopted by pragmatic, intentional agents seeking steadier footing in the presence of epistemic uncertainty.’ (Nelson and Katzenstein 2014, p.362) This focus on conventions highlights how practices gain force by being used and becoming familiar. For Nelson and Katzenstein, conventions are ‘social’, and they serve their coordinative

function by becoming ‘common knowledge’. While the models used in finance are rooted in ‘some theory and historical evidence’, Nelson and Katzenstein (2014, p.363) propose that they have been rendered ‘tractable’ by social processes. Thus theory is not so much performed as absorbed.

Reading McKenzie together with Nelson and Katzenstein, conventions appear modifiable but sticky and path dependent. Nölke’s (2010) analysis of private international standard-setting by the International Accounting Standards Board (IASB) provides insights into the reasons why conventions might not be changed even when they are known to be dysfunctional. The IASB persisted with fair value accounting (valuing assets and liabilities at current market prices) in the face of evidence that it could be procyclical and heighten financial instability. In explaining its reluctance to vary the rules, the Board argued that ‘markets would be more confused by some sort of arbitrary measurement attribute’ (Nölke 2010,p.40). As Nölke puts it, the standard-setters ‘cherish the consistency of their models’ (2010, p.45). They rejected pressure to produce ‘regulatory numbers’ oriented towards public policy goals, fearing erosion of their own authority. While Nölke’s interpretation is that private international standard-setting was oriented towards the protection of investor interests and colored by the dominance of the Anglo-American model of capitalism in the regulatory setup, his account also shows how a private regulatory body may be locked into the performance of a theory for reasons of reputation and credibility. It might be thought that a public regulator can escape this lock-in because it has coercive authority. But public regulators also have reasons to be concerned about reputation and credibility. Their enforcement powers are often limited, cumbersome and subject to challenge in the courts, leading regulators to prefer persuasive techniques such as benchmarking and the promulgation of codes of practice.

The following discussion identifies several reasons why pension fund valuation has been colonized by financialized techniques, drawing on Chiapello (2015). These include ‘spillover’ from accounting practices: a process which helps us to appreciate how techniques can become pervasive, eliminating distinctive practices within a sub-sector. There are also ‘herding’ tendencies created by the regulator’s reliance on norms and

benchmarks to assess valuation practices, and tendency to reject claims that a sector or scheme is idiosyncratic. Both these processes can be found in Chiapello's (2015) account of colonization. There is also a third process at work noted by Nölke, which is that the negotiated style of regulation creates a collective action problem in which the regulator is reluctant to change course or create exceptions for fear of damaging its authority.

Black's (2008) account of the 'principles-led' approach to regulation adopted in the UK gives some insight into how regulation becomes locked onto particular paths and practices. Principles-based regulation is a particular form of interaction between the regulator and the industry which delegates to regulatees the task of establishing appropriate internal controls to ensure that outcomes align with the regulator's objectives or principles. The idea that this would mean a 'light touch' was promoted by some British public authorities as part of their program of regulatory competition in the financial sector (Black 2008, p.10). But the reality is more complex. Far from engendering risky behavior by the regulatee, those to whom discretion is delegated may take a precautionary approach due to uncertainty about what will be acceptable to the regulator (Black 2008, pp.28-29). Furthermore, uncertainty leads regulated firms to embrace guidance from a community of advisers and consultants which also tries to reduce uncertainty by acting as 'a force for convergence on a set of broadly common practices' (Black 2008, p.28). As Nelson and Katzenstein (2014) emphasize, this convergence is founded in 'common knowledge' of basic principles of financial economics.

There is a substantial body of criticism of financial regulation in the UK which emphasizes the regulator's close and cooperative relationship with market actors (Johal et al 2014). Dorn (2015, p.23) notes that, in regulating the City of London, there were significant changes in methods: 'from chubby chats to slide rules, then from slide rules to computerised models.. [but] this was not change from private to public.' Dorn argues that 'knowledge remained private' in international finance, and this explains why outcomes have been in the interests of finance, which takes excessive risks and then manages to privatize profits and socialize losses. For Johal et al (2014), the answer is to reduce the distance between regulation and democratic control. Dorn (2015) also argues for a

reassertion of democratic control: he takes aim particularly at the role of international private regulators, and argues for a return to the national level of politically-accountable regulation. Outcomes would then be more diverse, but, he argues, also more robust.

The argument advanced here is not that private interests dominate over the public good in pensions regulation. Instead, it is proposed that the way valuations are conducted can be seen as a kind of public-private joint endeavor. Pension professionals and the regulator use the same models, and both contribute to their development and implementation. This means that, when we see perverse outcomes that are not in the public interest, we cannot immediately conclude that the interests of one party are prevailing over others, or that more political control would serve the public interest better. Rather, the challenge is to understand how dysfunctional practices have become established, and what kind of collective action is needed to change them.

3. Derisking in UK defined benefit pension schemes

In the UK, there has been a pronounced and steady trend since the early 2000s in the composition of pension fund investments, towards bonds and away from equities and other assets. The headline figures for defined benefit pensions covered by the Pension Protection Fund are that the share of portfolios allocated to equities fell from 61% in 2006 to 27% in 2018, while the bond share rose from 28% to 59% (Pension Protection Fund 2018, p. 4.) An analysis for the Bank of England by Douglas and Roberts-Sklar (2018) found that the shift towards bonds was widespread over different employers and schemes, with only underfunded schemes backed by strong corporate sponsors bucking the trend.

This section aims to locate the UK case within the wider landscape of pension fund governance. The UK has been distinctive in the extent to which funds have altered their asset allocations away from equities and towards bonds. A recent study by McCarthy et al (2016) highlights the very opposite trend in investment patterns in the US, the Netherlands and Finland. Between 1950 and 1980 (US), 1980 and 2000 (Netherlands), or still more recently (Finland), there was a pronounced shift out of bonds and towards

equities in all three countries. Using OECD data on similar kinds of schemes – 'traditional DB pensions' – to update their findings suggests that the thrust of their analysis still holds. The bond share has risen in the US, but only slightly, from an average of 36% in 2000-07 to 40% in 2014-18, while in Finland it has fallen from 45% in 2004-07 to 30% in 2014-18.[2] More comprehensive data are available for the grand total of all pension schemes, including DC schemes. These show no sustained change in the risk profile of US schemes, a move out of bonds in Finland, and volatility in allocation in the Netherlands.

This presents a puzzle: if derisking is a product of valuation practices, and if those practices are derived from financial economics, we should expect that countries that are integrated into the world of finance all demonstrate similar trends. Indeed, there is a widely-held view that, because financial economics dictates derisking, it will have, or is having, a negative effect on the sustainability of DB schemes across the developed world (Monk 2009). To explain these different national patterns and trajectories, we need to explain how some pension systems have been immunized against financial economics, or how they have translated the key insights differently.

The study by McCarthy et al (2016) illustrates how a key idea of financial economics, which they term 'modern portfolio theory' (MPT), spread slowly and sporadically among countries with large funded pension schemes. The central idea of MPT was that fund managers could manage risk without sacrificing returns by holding a diversified portfolio of assets. This insight fell on stony ground in countries which maintained quantitative asset restrictions (QAR), which compelled fund managers to hold fixed proportions of assets deemed to be safe. But in countries which gave pension fund trustees discretion to choose their own prudent strategy – those governed by the Prudent Person Rule (PPR) – the insights of modern portfolio theory were quickly adopted (Horváthová et al 2017). Thus PPR was associated with investment allocations heavily weighted towards equities in the two early adopters, the US and the UK. The changes found by McCarthy et al for Finland and the Netherlands reflect the subsequent adoption of the PPR and accompanying dissemination of portfolio theory.

The valuation practices that have driven derisking in the UK are located within a PPR regime. To understand why other PPR systems have not shown the same tendencies, we need to find relevant differences in the determinants of investment strategy beyond the familiar PPR/QAR difference. Focusing on the relatively well-documented cases of the Netherlands, Finland and the USA, three differences emerge which are now discussed in turn. They are (1) the roles of employers and employee representatives in governance, relative to financial intermediaries; (2) the extent of risk-sharing with beneficiaries, and (3) other factors affecting public exposure to pension scheme losses, which are reflected in various regulatory rules to do with discount rates, smoothing and recovery periods.

The roles of employers and employee representatives in governance, relative to financial intermediaries, is central to the extent of financialization that occurs. Analyses of investment strategy based on shareholder value maximization (SVM) often ignore the industrial relations of pension schemes, even though increases in employment costs will also impair shareholder value. This financialized world view came to be reflected in boardrooms, as new accounting standards changed the internal corporate politics of pensions. Once largely ignored by senior management and left to Human Resources departments to cultivate, the prospect of pensions having a substantial balance sheet impact led finance directors to take a close interest (Whiteside 2003).

While schemes cross-nationally have experienced this change in the internal corporate politics of pensions, we can expect that industrial relations concerns bear more heavily in continental European pension systems where governing boards have balanced employer-employee representation than in the Anglo-American model where employer-nominated trustees dominate. However, the expectation has been that member representation leads to more conservative investment allocations, whereas employers will favor riskier equity investment (Wiss 2015, p.135). McCarthy et al (2016: 761-3) argue that this pattern was not sustained in either the Netherlands or Finland because of contribution cost-sharing

between employers and employees. Unions in both countries saw higher returns through equity investment as preferable to contribution increases.

McCarthy et al (2016) explain investment allocation by identifying the evolving preferences of unions and employers, particularly around shareholder activism. While aspects of fund management have been delegated to intermediaries, they cleave to the premise that 'it is employers and employees who are ultimately responsible for making decisions about broad asset allocation' (Gelepithis 2019 543). Gelepithis challenges this premise, arguing that 'financial professionals involved in pension fund capitalism such as asset managers, actuaries, and pension consultants exert an independent influence over pension fund investment strategies' (2019 545). The analysis presented in this article supports Gelepithis's claim that derisking has been promoted by financial intermediaries, but this raises the question of why the risk-management models of intermediaries have gained more influence in the UK than in other comparable systems. Answering this question brings us to the two other sources of variation noted above: the extent of risk-sharing between employer sponsors and the beneficiaries of pension promises, and the effect of public sector exposure on the regulatory framework.

The idea of a 'defined benefit' appears to preclude the possibility that benefits may be adjusted in the light of investment returns, but DB systems often retain some scope to adjust benefits at the margins. Most striking is the Dutch case, where poor investment returns can lead to adjustment, not only of pension promises, but also of pensions in payment (Wiss 2019, pp.509-510). Discretion over the inflation-indexation of pension benefits is also found in the US, where underfunded schemes must scale back indexation. In the UK, trustees for many years retained some discretion over indexation and other improvements to benefits, but this was eliminated, at least at low rates of inflation, by successive Pensions Acts. In short, benefit promises are exceptionally well-protected from investment underperformance in the UK. This means that any shortfall in the assets of the fund relative to its liabilities (promised pensions) must be made up by the employer rather than by scaling back liabilities. Rapid repair will mean that the contributions that employers have to pay become volatile, and if this volatility is costly to the business,

employers will seek to reduce it by reducing the volatility of asset values, i.e. by derisking.

There are some fundamental similarities in regulation across countries: the practices of discounting liabilities to get a present value and comparing that with marked-to-market asset values are pervasive. But systems differ in how much 'smoothing' regulators allow, and how they respond to underfunding. They can allow long recovery periods, or they can insist that any shortfall is repaired rapidly. Pension systems also differ in the rules governing overfunding; i.e. in the extent to which reserves can be accumulated to buffer the impact of volatile asset prices. In the UK, the employer owns the surplus and can take a contributions holiday (a practice which tax rules have, at times, required). Other systems allow surpluses to accumulate, which means that a scheme is less likely to be forced to derisk to guard against deficits. Without going into all the details, it is important to note that a funding regime can be seen as 'strict' in requiring a high level of funding, without this also dictating derisking. As the following sections explain, derisking is driven not by concerns about the level of funding, but about its volatility.

In summary, the UK can be seen as an extreme case of financialized valuation in defined benefit pensions. The ideas about valuation discussed below are widely disseminated cross-nationally, but in each system they come up against countervailing ideas, carried into valuation governance by unions, employers, actuaries, regulators and governments. These countervailing ideas are widely known and discussed in the UK, but they are not carried effectively into valuation governance. The following sections examine why this is.

4. Caution: Theory at work

This section first provides a brief summary of how the ideas of present value, marking to market and probabilistic risk estimation come together in the periodic (triennial) process of conducting a DB pension scheme valuation in the UK. The discussion then backtracks

to the previous method of regulating valuations: the Minimum Funding Requirement (MFR) introduced in 1995. The effect of the MFR on investment allocation was widely recognized as dysfunctional, and the problems were summed up in a report by a leading City grandee, Paul Myners, in 2001. Myners' recommendations informed the 2004 Pension Act, which introduced the Scheme Specific Funding Requirement, which remains the basis of the system operating today. The recommendations were also translated into the 'Myners Principles' for institutional investment fund management. The widespread promulgation of these Principles creates the impression that Myners' recommendations were adopted and implemented, yet on closer inspection it turns out that they have been eviscerated. A 2012 report on institutional investment (Kay 2012b) showed that essentially the same issues as identified in 2001 remained.

The aim of a valuation is to establish whether the accumulated assets of a pension fund will be sufficient to meet its accumulated liabilities. These liabilities consist of a stream of pension payments, often far into the future. The standard practice is to discount those liabilities into a single figure - a 'present value' – which can then be compared with the accumulated assets. If assets are invested in 'rewarded risk' classes and 'marked to market', it is inevitable that the valuation outcome will be volatile. Conversely, 'valuation risk' can be reduced by matching the assets of the fund to the basis for the discount rate used to calculate liabilities. For example, if the discount rate is based on the interest rate on UK government bonds ('gilts'), then investing assets in gilts ensures that a fall in that discount rate, which raises the present value of liabilities, will also raise the market value of matched assets.

This process of matching to manage valuation risk is conventionally known as 'derisking', although it does not actually make pensions more secure. As Merton (2014) highlights, conventional risk metrics focus on volatility in the value of the accumulated fund (asset focus) instead of looking at the risks to retirement income (income focus). The safest investment from an income viewpoint – a deferred inflation-protected annuity – may have a volatile price, but this asset price volatility does not present a risk to future pension income. Furthermore, since a so-called high risk investment strategy generates

more income than a low-risk strategy, the income lens reverses the asset lens on what is risky. The 'derisked' strategy is the one less likely to secure future pensions (Jacka and Hernandez 2019).

Arguably, the traditional approaches of the actuarial profession implemented an income focus. However, they did so with techniques that came to appear old fashioned and unduly discretionary as financial economics took hold, such as 'smoothing' asset values rather than marking them to market. The victory of financial economics in UK pensions regulation partly reflected a loss of faith in actuarial judgment, triggered at least in part by the high-profile failure of the Equitable Life insurance company (Collins et al 2009). The ensuing crisis and reform of the actuarial profession contributed to the unification of professional approaches to pension fund valuation around the insights of financial economics.

Trustees and employers are not compelled to engage in matching to manage valuation risk, but they can be forced into matching if they cannot demonstrate a capacity to bear that risk. The procedure followed by the regulator is to require schemes to estimate the range of future asset values (generated by probabilistic modeling) and check adverse outcomes against the employer covenant, a measure of the employer's financial strength and backing of the fund. The logic is that the employer must be able to repair the fund if the risky strategy does not pay off. Trustees can choose to invest in high-return but volatile assets and, correspondingly, select a relatively high scheme specific discount rate, but it takes a strong employer covenant (or a scheme surplus) to do so (Deloitte 2018).

A lot rests on the assessment of the employer covenant. This assessment is the responsibility of the trustees of the scheme, and they can do it themselves – a so-called 'DIY assessment'. However, the regulator has discouraged this by questioning the trustees' independence and expertise, and a small industry of covenant practitioners has emerged. While TPR does not conduct its own assessment of the covenant, it can challenge the assessment put forward by the scheme actuary on the advice of the

covenant practitioner. This in turn encourages the practitioner to anticipate the basis of TPR's view and incorporate this into its own work. Thus there is a kind of circular flow of modelling, knowledge and practice between the regulator and industry professionals.

As Black (2008) argued, this circular flow is fuelled by a search for common standards, benchmarks and norms. This produces herding. There is trustee herding in investment strategies (PCWG 2014: 19-20), and the same is true of the selection of discount rates for the calculation of the present value of liabilities. Herding is facilitated by TPR, which publishes regular reports on the distribution of discount rates used in scheme valuations. The sector has long had a practice of using returns on gilts as a base for stating the discount rate: a so-called 'gilts plus' approach. This has been entrenched by the regulator, who presents rates in the form of margins over gilts. Thus the structure of information privileges so-called derisking strategies in the way it promotes norms and highlights deviations.

To sum up: 'valuation risk' is not the same as risk to pension payments. The valuation is a way of checking whether the accumulated pension fund is on track to be able to pay the promised pensions, but it is just a check, and it is highly sensitive to the assumptions used to inform asset valuation, the selection of a discount rate, and the modelling of risk. Asset price volatility and changes in interest rates driving liability discount rates generate valuation risk and make it attractive to adopt an investment strategy which matches assets to the method for calculating liabilities.

The Minimum Funding Requirement and the Myners Review

The possibility that valuation practices could drive investment strategies in a counterproductive way became apparent in the early 2000s. The 1995 Pensions Act had introduced a Minimum Funding Requirement (MFR), effectively a valuation method. The MFR prescribed the discount rates that should be used to calculate the present value of the scheme's liabilities. For pensions in payment, the prescribed discount rate was the rate of return on gilts, while the return on equities was used to discount liabilities for scheme members far from retirement, and a blend of the two for those within ten years of

retirement. It was not required that funds follow this pattern in their investment strategy, but any 'mismatch' brought valuation risk. Schemes with a substantial surplus of assets over liabilities on the MFR test or a strong sponsoring employer could afford to mismatch, and many schemes were in this position in the mid-1990s. After the dot.com crash of 2000, however, these surpluses disappeared, and there was a pronounced move to matching. In effect, the MFR-based calculation of the present value of liabilities became the liability which investment managers sought to match, rather than the pension income promised by schemes.

In 2000, the Labour Chancellor of the Exchequer, Gordon Brown, asked the chief executive of the investment management company Gartmore, Paul Myners, to conduct a review of institutional investment in the UK, with a remit to consider specifically whether there were distortions in investment decision-making. Myners' main conclusion was that investment management was vulnerable to short-termism to meet the competitive demands of the fund manager 'beauty parade' identified long ago by Keynes. His recommendations amounted to a sustained attempt to promote more patient investment by UK pension funds. Features of patient investment include, inter alia, avoiding short time horizons for benchmarking investment performance, and actively engaging with corporate governance instead of buying and selling shares in response to corporate reporting (Deeg and Hardie 2016). These ideas were incorporated into the so-called Myners Principles, which defined benefit pension schemes are required to sign up to. But the principles have remained voluntary and advisory, and have also been watered down over time. Myners wanted the principle of shareholder activism to be included in legislation, but this was not done. The anti-short-termism principle was 'clarified' in a 2004 review to state simply that there should be clear horizons, with no reference to premature termination, or even to the expected duration of those horizons (HM Treasury 2004, 3.38).

Nowhere was the ineffectiveness of Myners' recommendations clearer than in the evolution of practices over pension fund valuation. Myners argued that there were specific distortions arising from the effect of the MFR on institutional investment. He

proposed that government regulation should avoid prescribing the discount rate in pension valuations, because that induced fund managers to match the assets used to generate the discount rate for the liabilities (Myners 2001: 3.47). Instead there should be a 'scheme specific funding requirement' which allowed actuaries to choose their own discount rate, linked to the scheme trustees' choice of investment strategy. This recommendation was accepted by the government and incorporated in legislation in the 2004 Pensions Act, but it has proved not to have the effect that Myners intended.

Myners' second principle, 'clear objectives', proposed that the objectives of the investment strategy should be determined by the scheme's liabilities, rather than matching a market index or achieving benchmarks based on the performance of other funds. In the context of the review, it was clear that the point of this edict was to combat short-termism: scheme liabilities (promised pensions) were often far into the future, implying that a far-sighted investment strategy could be adopted. But the time profile of liabilities varied, so the exact strategy would be scheme-specific.

Myners' analysis was based on the well-established idea of Asset-Liability Matching (ALM), also termed liability-driven investment. An ALM study is concerned with working out the horizons of investors, and deriving a strategy accordingly. The idea that a fund's investment strategy for its assets should match the nature of its liabilities has been part of investment practice for a long time. Indeed, one of the reasons that actuaries advocated equity investment in the 1950s was that equities were seen as a good long-term match for real liabilities, such as those of a DB scheme with inflation-protected pension promises (Goobey 2005). Bauer et al (2006) suggest that the development of more precise applications of the principles of ALM can be traced to contributions to the financial economics literature in the late 1960s which showed that the optimal portfolio choice of long-term investors differed from that of short-term investors.

Applied to a DB scheme, ALM implies that schemes with increasing numbers of pensioner members relative to contributors should shift into less volatile assets. But the aging of scheme memberships does not explain the derisking that has occurred in the UK.

ALM studies by Bauer et al (2006) and Blake (2003), who used a model specifically calibrated on UK pension funds, rejected the possibility that DB fund liabilities were best matched by holding gilts. Something else had to explain why UK pension funds were sacrificing returns by moving into safer (less volatile) assets.

The short explanation of why ALM has become associated with derisking is that pension fund trustees and their advisors match the *valuation* liability – the present value of liabilities – rather than the stream of future liabilities. This is because they are forced to focus on 'valuation risk', rather than risks to the flow of pension payments. A focus on valuation risk means, in effect, shortening the time horizon of the scheme. Far from weathering the storms of financial market volatility, such volatility generates valuation risk that must be managed. It follows that an ALM strategy which is focused on managing valuation risk will have a short-term orientation.

Trustees are forced to focus on valuation risk for two main reasons. First, if they take valuation risk then, sooner or later, a triennial valuation will indicate that the scheme is underfunded, Since the regulator is generally reluctant to allow smoothing and tends to insist on short recovery periods, an adverse valuation has real consequences for sponsoring employers, who will have to increase their contributions, albeit only temporarily. Second, the possibility that employers will be called upon to repair the fund is incorporated into an anticipatory procedure where the employer's capacity to repair is checked: this is the assessment of covenant. Estimates of reliance on the covenant are made by modeling the variance of returns. Even if there is substantial 'mean reversion' in the performance of volatile assets, model-generated episodes of poor returns can lead to the verdict that the scheme is taking too much risk.

For its critics, starting with Myners, valuation risk is not a real risk, but a risk generated by regulatory calculations. But by the time of the second review of the Myners principles, in 2008, managing valuation risk had become a central task of trustees. The principle that the investment strategy should reflect the scheme's liabilities had been recast into 'taking into account the risks associated with their liabilities valuation', notably 'the strength of

the sponsor covenant [and] the risk of sponsor default' (HM Treasury et al 2008, p.20). The principle was mapped onto TPR's code of practice No 3 on Funding Defined Benefits, which places valuation risk front and center. Trustees are exhorted to 'understand and quantify the liability valuation risks you are running' and to consider mitigating those risks 'by investing in assets that move in a similar way to the value placed on the liabilities as market conditions change' (TPR 2019: 53).

A change of government in 2010 brought into office the Liberal Democrat Business Secretary, Vince Cable, a long-standing critic of the performance of the UK's financial sector. He commissioned the academic and journalist John Kay to do another review, focused on short-termism in equity markets. Kay organized his review in the familiar consultative fashion of these endeavors in the UK, appointing an advisory group consisting of an industrialist, a pensions professional and an asset management executive. He also arranged a number of roundtable events, at which the Bank of England's Andrew Haldane was a notable participant (Clark 2013). The outcome was a wide-ranging critique of current practices. Of particular relevance to pension scheme valuation were Kay's comments on mark-to-market accounting, especially as it affected the reporting of pension fund deficits or surpluses on corporate balance sheets. He noted that '[c]hanges in bond yields may have large effects on the valuation of assets and liabilities even if the anticipated cash flows remain the same.' (Kay 2012a: 22). Marked to market information about assets and liabilities which are not going to be realized was arguably 'useless or misleading', yet 'even if directors, shareholders and investment intermediaries attempt to disregard information they perceive as having little or no value, they may be unable to do so.' (Kay 2012a: 23) This is because TPR requires corporate sponsors to put in place deficit recovery plans if valuations show a deficit, which 'means that the information contained in regular mark to market assessments is material whether or not the company believes it is relevant.'

Marking to market or fair value accounting provides a good illustration of the problem that Kay faced in formulating recommendations that might change practices. It was not possible to reverse decisions on the adoption of fair value, which had been taken in other

venues. The decisions of the International Accounting Standards Board (IASB) had been quickly translated into UK standards by the Accounting Standards Board (ASB), which was allowed considerable autonomy to 'self-regulate' by the government. The relevant international standard for calculating pension liabilities in company accounts, IAS19, was translated into Financial Reporting Standard 17 (FRS17) for implementation from 2005. Actuaries and other pension professionals recognized the stress that FRS17 would put on occupational pensions, but the relevant decisions were not made by those involved in regulating pensions, but by the ASB. Some employers with occupational pensions and unions seeking to defend members' benefits protested against the new standard, but they had no institutional foothold in the relevant decision-making space (Bridgen and Meyer 2009).

Yet another critique of contemporary patterns of institutional investment came from the Bank of England. Andrew Haldane, Executive Director for Financial Stability at the time, convened a 'Procyclicality Working Group' (PCWG), comprising academics, pension professionals and other luminaries of the investment world (PCWG 2014, p.3). Its report also took aim at some of the canons of financial theory. In particular, it challenged the understanding of risk as volatility. 'There also appears to have been a transition towards defining risk in terms of volatility.. However volatility is not necessarily a good indicator of risk..' (PCWG 2014: 20) It followed that so-called derisking does not really reduce risk. 'This process of shifting portfolio holdings from equities to fixed income, including index-linked instruments, is commonly referred to as "de-risking". Although the shift does reduce market risk, it effectively 'locks-in' current market rates, which particularly in the current low-rates environment, can be costly.' (PCWG 2014: 38) This cost brings other risks: notably the risk that pension promises cannot be fulfilled without increases in contributions.

Research for the report found some signs of procyclicality in private sector DB pension schemes, whereas local authority pension funds, which are taxpayer-backed and therefore not subject to the same rules about assessing valuation risk in the light of the employer covenant, had pursued a countercyclical strategy (PCWG 2014: 5, 39). More generally,

the report conveyed a belief among Bank economists that financial stability called for diversity in investor behavior, with long-term institutional investors well-placed to follow different principles to those guiding banks and hedge funds. This section has argued that a focus on valuation risk prevented this: it meant compressing the long-term into the short-term, and responding to the same signals and parameters as other market actors. But the critics seemed unable to develop their critiques into policies that would change pension fund behavior, even though they were well-placed in official circles. Myners' recommendation of a scheme-specific funding requirement was a clear attempt to promote diversity and had found its way onto the statute book, but subsequent regulatory and self-regulatory practices had undermined its intended effects.

5. The political embrace of financialized thinking

This section examines the political response to a campaign led by the National Association of Pension Funds (NAPF, now the Pension and Lifetime Savings Association, PLSA) in 2012-14 to raise the discount rates used in valuations. The government was reluctant to intervene, and the explanation advanced here was that it broadly embraced the use of valuations to check the viability of schemes, and would not take actions that it feared would raise the risk of scheme failure. This political risk-aversity casts doubt upon the assumption that more democratization of financial governance would bring about major changes in regulation and produce outcomes nearer to the public interest.

In the period soon after the adoption of QE by the Bank of England, both the Bank and the pensions industry agreed that something needed to be done to mitigate its effect on defined benefit pension schemes. Initially, the Bank rejected the industry's complaints that QE was damaging the sector, but eventually it came to accept that monetary policy could interact in a perverse way with pension scheme governance practices (Bank of England 2012). The pensions industry, led by NAPF, campaigned for special regulatory measures to be taken to counter the effects of QE. NAPF focused on the effect of low

interest rates on valuations, whereas the regulator sought to preserve the existing approach to valuations but allow more flexibility in recovery plans in response to difficult economic conditions. In NAPF's view, it was important to tackle the valuation itself, to 'avoid the negotiations around recovery plans beginning from what might be described as a recklessly prudent starting point.' (NAPF 2012: 1).

NAPF evaluated two ways of mitigating the effect of low gilt yields on valuations: smoothing the discount rate applied and adding a temporary mark-up to the rate. Smoothing had disadvantages: it did not suit those funds which had hedged against changes in gilts rates, and it would mean that gilts no longer provided a good match for valuation risks. The Bank might have seen this as an advantage, but NAPF did not; it would undermine established investment practices. NAPF preferred a temporary markup: this would give trustees a clear 'green light' to adjust the valuation. It would be an explicitly political decision: a statement or direction from the Government, reflecting 'the political judgement required to trade off the UK corporate growth agenda against the TPR's objectives' (NAPF 2012: 24). Although the judgment was political, there was an attempt to find a technical basis for the markup: it 'would be within the range of the Bank of England's estimates of the impact of Quantitative Easing on gilt yields' (NAPF 2012: 25).

One of the paradoxes of the NAPF campaign was that the industry sought to preserve discretion in valuation while at the same time arguing that government intervention was needed. NAPF repeatedly endorsed the 'flexibility' of the scheme specific funding regime. But that flexibility implied that trustees could make their own decisions to adjust discount rates in the light of QE. To explain why trustees could not take appropriate steps themselves, NAPF (2012: 6-7) argued that they were 'unlikely to feel comfortable taking a less conventional approach to agreeing discount rate assumptions given the guidance already issued by TPR' even though this guidance has no statutory authority. Thus TPR was supposedly to blame, but TPR relies on normal industry practice to give force to its views. The situation can be understood as a collective action problem: if trustees could act in concert, they could raise the discount rate benchmarks and thereby all appear

'normal'. But a single scheme using a higher rate would be suspect: it would have to prove that it had the strength to underpin the risks it was supposedly taking.

The campaign by NAPF was quite explicitly an attempt by the industry to solve this problem by getting 'a clear Government statement or direction, given [i.e. against] TPR's current stance.' (NAPF 2012 p.1) The government did respond, but not as NAPF had asked. It declared itself 'determined to ensure that defined benefit pensions regulation does not act as a brake on investment and growth.' (HM Treasury 2012 p.44). But all that was offered was a consultation, in which smoothing was on the agenda but a markup not. An additional objective for the regulator requiring it to consider the affordability of deficit recovery plans for sponsoring employers was proposed, but not the stronger objective requested by NAPF, to promote good pension provision and to ensure the health and longevity of schemes (NAPF 2012 p.26).

It is clear in the consultation document issued by the Department of Work and Pensions (DWP) that the Government had come under considerable pressure to overrule the Regulator in 'informal discussions with a number of organisations and sponsoring employers over the summer of 2012' (DWP 2013 p.11). However, it is equally clear that the government was quite determined to duck this pressure. For example, the consultation identified changes to corporate accounting as a key factor: firms sought to reduce the effect of valuation volatility on balance sheets by reducing their allocation to equities, and the resulting lower returns then meant that an increase in contributions was required (DWP 2013 p.6). But the government claimed that nothing could be done about this: 'accounting standards are set independently by the Financial Reporting Council and not the Government and so are out of the scope of this document.' (DWP 2013 p.11). More generally, the consultation emphasized that valuation involved the exercise of judgment by a number of professionally qualified parties, and the government would not interfere with their judgment. It would send a gentle signal to the regulator with the addition of a new statutory objective to 'minimise any adverse impact on the sustainable growth of an employer' (introduced in 2014), but that was all.

One explanation for the government's caution is that it had learned a painful lesson from its experience of the MFR about the potential costs of close engagement with the process of certifying funds as balanced or in surplus. The MFR was widely understood as ensuring that pensions were secure, but it did not promise or achieve this. In 2004, the Parliamentary Ombudsman announced an enquiry into complaints made by about 100 members and trustees of pension schemes, who claimed that the government had ignored evidence in failing to warn members of the risks to their schemes, and also had provided members and trustees with inaccurate information (Thurley 2008 p.13). In 2006, she brought down a finding of maladministration, based on the government's failure to consider and balance relevant evidence, and rejecting the government's defence that it had appropriately relied on the recommendations of the actuarial profession. The government rejected the Ombudsman's findings, but subsequently the High Court quashed this rejection. The government was forced to compensate those affected.

This episode illustrated sharply the government's dilemma over securing pensions while also promoting productive risk-taking. Tightening regulatory requirements would increase the cost of schemes to employers, hastening their closure. But failure to regulate tightly exposed the government to claims for compensation. The scheme specific funding requirement was meant to address this dilemma by delegating the judgment of adequacy to trustees, advised by actuaries. If schemes failed, this would be down to failures by trustees, rather than maladministration by the government.

The government also sought to limit its exposure to pension compensation claims by establishing the Pension Protection Fund (PPF). Broadly, the PPF protected pensions in payment, while only partially honoring the accrued rights of members who had not yet retired. The element of risk-sharing - the loss borne by active members if their scheme failed – was consistent with a self-regulatory system in which trustees (acting on behalf of members) would have an incentive to monitor the scheme and prevent employers getting away with underfunding. But technical analysis of the insurance provided by the PPF suggested that this incentive would sometimes be insufficient. There was potential

‘moral hazard’, and regulation would be necessary to control claims on the fund (McCarthy and Neuberger 2005).

Protecting the PPF was one of the regulator’s statutory objectives. Arguably, it assumed too much significance. But TPR was politically pressured to pay attention to the PPF. Scheme failures have resulted in political outcries in which the regulator is blamed for not taking prior action against the sponsoring employer. For example, the failure of the outsourcing company Carillion in 2017 was followed by a scathing parliamentary report, and the then-CEO of TPR announced soon afterwards that she would not be seeking renewal of her contract. The Work and Pensions Committee of Parliament developed a practice of taking a close interest in the valuation outcomes of occupational pension schemes. The Committee’s website lists extensive correspondence with scheme trustees and the regulator. Its close interest reflects the political salience of the issues. When schemes fail, ordinary people are seen as falling victim to the machinations of corporate capitalism. Pension scheme failures provided an opportunity for a much wider attack on corporate greed. The Committee focused particularly on the ways in which equity could be extracted from companies, not only by excessive dividends but also through executive pay and consultancy fees. The main effect of political engagement is to put pressure on the regulator to be tougher and intervene more in the running of schemes. In 2018, the government announced plans for a new Pensions Act which would increase the powers of the regulator.

This section has traced a failed attempt to get the government to engage in pension scheme governance to override the precautionary orientation of the regulator. The diagnosis offered here is that it suited the government to delegate to trustees and the regulator, even if the resulting policy was not ideal. Depoliticization was eminently political: there was a blame-avoiding calculation that engagement was not worth the risk of being held responsible if schemes failed. Living with risk was unattractive to the government, especially given the political salience of potential moral hazard among employers.

6. Conclusion

This paper has sought to move beyond the simple and appealing story of the financial crisis and its aftermath, of a powerful financial sector overrunning supine governments and captured regulators. The approach adopted here challenges the frame of 'politics versus finance' by acknowledging the risk-return dilemma facing public authorities. State actors have a central role in constituting financial markets. They reap rewards from financial risk-taking, while also being exposed to contingent liabilities when adverse outcomes materialize.

The regulation of collective pension schemes brings a dilemma into sharp focus. If financial risk-taking is to be managed for social ends, it is necessary to have collective institutions so that individuals can benefit from risk pooling. But collective institutions bring politics - the politics of preventing or mitigating failure – and the government is roped in as guarantor of last resort. One way for governments to escape this fate is to allow collective institutions to be destroyed, and instead encourage individual risk-bearing. In the pensions area, this means promoting individual DC funds. Aside from the social costs of not pooling risk, this potentially has damaging cyclical and structural effects in financial markets. Thus it is important to sustain collective risk pooling in vehicles like occupational pension funds. But many UK pension funds have adopted low-return investment strategies which are likely to hasten their closure.

This paper has sought to identify the reasons why. It has shown that schemes are run according to practices constructed and maintained by financial intermediaries in dialogue with the regulator. Principles-based regulation enables the industry to develop solutions to public policy problems, in the expectation that these solutions will be more efficient than imposed measures. But this mode of regulation creates strong pressures to converge on common models and practices, and this in turn engenders herding which undermines the supposed advantages of competitive market-based provision.

The industry has embraced financial models: the solution to problems is found in calculations. As Gelepithis (2019) emphasized, this gives a significant role to asset

managers and other investment intermediaries in determining outcomes. They see themselves as neutral professionals, and indeed they have no obvious interest in the adoption of one model over another. They do, however, have an interest in advocating technical solutions which they can implement. Their interaction with the regulator seems to create an impenetrable structure of governance, whereby even expert critics like those at the Bank of England have not been able to find a foothold for their views.

The data presented in section 3 suggest that derisking in the UK is more endemic than in other comparable pension systems. At first sight, it is surprising that a system with no quantitative rules and substantial elements of trustee and actuarial discretion has produced this bias towards precautionary behavior. While this article cannot offer a systematic comparison, notable features of the UK case include the weak representation of member interests in scheme governance, along with an assumption that employers who favor 'rewarded risk' investment strategies are exhibiting moral hazard. The structure of governance is such that those who have a clear interest in outcomes are sidelined, and technical calculations are relied upon.

This article has argued that 'politicization' in the sense of more government involvement does not offer a remedy to the dysfunctional effects of financialized governance on pension funds, as governments also embrace precautionary calculations. Regulatory entanglement with financialized risk management is not helped by a political environment which is intolerant of uncertainty and inclined to treat scheme failures as disasters and scandals. Political pressure on the regulator instead produces even more insistence on finding authoritative common standards. This authority is yielded to intermediaries whose performance of financial economic theory is seen as neutral and impartial. On present trends, these practices will lead to the destruction of collective risk-sharing in occupational pensions and its replacement with individualized arrangements which subject households to a much greater degree of old age income insecurity.

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[1] In the US, the term ‘reckless conservatism’ has been used, for example in the context of a Department of Labor campaign to encourage DC investors towards equities and away from low-risk, low-return assets (Langley 2006: 928).

[2] Averages over several years are given because allocations have been volatile. OECD data for Finland for this variable are only available from 2004.